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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,732	04/18/2008	Sarbjee Kaur	Q92536	7733
23373	7590	03/17/2011	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			WEIER, ANTHONY J	
			ART UNIT	PAPER NUMBER
			1781	
			NOTIFICATION DATE	DELIVERY MODE
			03/17/2011	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/562,732	<b>Applicant(s)</b> KAUR ET AL.	
	<b>Examiner</b> Anthony Weier	<b>Art Unit</b> 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,7,8,10 and 13-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27 and 28 is/are allowed.
- 6) ☒ Claim(s) 1-4,7,8,10,13-26 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112, 1st***

1. Claims 1-4, 7, 8, 10, 13-26, and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original specification provides support for the specific preparation of the second food grade lupin (PF2) by raising the pH of the acid soluble lupin protein component to pH 5-7 wherein same is then recovered. Without reciting this step of raising the pH, claim 1 is now recited broad enough to compass other means for preparing said second food grade lupin (PF2). This is a new matter rejection.

### ***Claim Rejections - 35 USC § 112, 2nd***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4, 7, 8, 10, 13-26, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is confusing, as specifically recited, in that it is not clear how the lupin protein isolate, PF2, is recovered and whether or not this is simply a dried version of the supernatant after removing PF1 to make same an isolate. In addition, it is not clear how PF3 differs from PF2.

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Claims 13-15, 17, 19, and 21 are indefinite in that it is not clear whether said “lupin protein extract” refers to PF1 (specifically referred to as an extract in claim 1) or PF3 which is referred to as a “fraction” in claim 1. It is presumed that PF2, a protein isolate, is not considered with respect to claims 13-15, 17, 19, and 21.

Claims 18, 20, and 22 are indefinite in that it refers to PF2 as an extract; claim 1 refers to same as (the more limiting) “isolate”.

Claim 23 is indefinite in that it is not clear whether same refers only to PF2 (the only protein material referred to as an isolate in claim 1) or whether same also refers to “the lupin protein isolate” may be PF1 or PF3 after further modification.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15-18, 23, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/11143.

WO 99/11143 discloses a food product containing lupin protein wherein same is used as a replacement for other protein sources in food (see Examples). Because lupin protein as a food is a nutritive source, it is further considered to be a nutritional supplement when employed in foods as called for in claim 17. It should be noted that said claims are product claims and the lupin protein content of foods in WO 99/11143 would naturally include the lupin protein extract or isolate derived from instant claim 1

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even though same would be only a portion of the lupin protein contained in the food products of WO 99/11143. Claim 15, 17, and 23 make no distinction that the food product must only contain the lupin protein extract produced by claim 1. Note that these product claims refer to "containing a lupin protein" wherein "containing" is commensurate with the open claim language of "comprising".

5. Claims 15, 17, 18, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's own admission.

Applicant admits the use of lupin protein extracts in foods (as additives) and in feedstock (paragraphs 3-5). Because lupin protein as a food is a nutritive source, it is further considered to be a nutritional supplement when employed in foods as called for in claim 17. It should be noted that said claims are product claims and the lupin protein content of a general extraction would naturally include the lupin protein extract derived from instant claim 1 even though same would also contain other components including lupin fibre. Said claims make no distinction that the food product must only contain the particularly refined lupin protein extract produced by claim 1. Note that these product claims refer to "containing a lupin protein" wherein "containing" is commensurate with the open claim language of "comprising".

6. Claims 15-18, 23, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by King et al (Journal of Food Science, Vol. 50, 1985).

King et al discloses a product produced by a process wherein lupin flour undergoes an alkali treatment (pH 8.6) followed by separating refuse from the supernatant (which is essentially the extract of alkali soluble protein called for in step

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(b) in instant claim 1, the fibrous portion being the refuse), said supernatant then being treated with acid at a pH of, for example, 4.9 wherein a lupin protein extract is precipitated and collected (PF1 as called for in the instant claims; same would be food grade as it is later used in food preparations; see "Conclusions" on page 86). The collected lupin protein extract is then treated to a pH of, for example, 7 and subsequently dried to provide a protein isolate (see page 82, "Preparation of Isolates"; page 83, Fig. 1). King et al further discloses foods which may contain said lupin protein isolates including its use in "milk substitute formulations for nutritional purposes" (see "Conclusions"). In addition, the initial alkali step provides not only the extract of alkali soluble protein but also a fraction of residue that is inherently comprising alkali insoluble fibrous material as called for in instant claims 25 and 28.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krinski et al.

Krinski et al discloses the use of pea protein in adhesives used in paper coatings (col. 3, lines 45 and 46). Lupins are from the pea family and a known source of protein in extracted form and typically containing fiber (Applicant's own admission, paragraphs 2-6). It would have been obvious to one having ordinary skill in the art at the time of the

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invention to have employed a lupin protein extract as a matter of preference depending on, for example, cost or availability. It should be noted that said claims are product claims and the lupin protein content of a general extraction would naturally include the lupin protein extract derived from instant claim 1 even though same would also contain lupin fibre. Claim 19 makes no distinction that the food product must only contain the particularly refined lupin protein extract produced by claim 1.

9. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al (see above) taken together with Krinski et al.

Claims 19 and 20 further call for a paper coating that includes said lupin protein extract. Krinski et al teaches the use of lupin protein in adhesives used in paper coatings (see "pea protein", col. 3, lines 45 and 46). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed the lupin protein extract of King et al in a paper coating as a known use for such material.

10. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al (see above) taken together with Applicant's own admission or Bertram et al.

Claims 21 and 22 further call for a feed that includes said lupin protein extract. Bertram et al teaches the use of pea protein (e.g. lupin) in animal feeds (e.g. claim 3). Applicant admits lupin protein use in feedstock (paragraph 3). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed the lupin protein extract of King et al in animal feed as a known use for such

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material.

***Allowable Subject Matter***

11. Claim 27 and 28 are allowed.

12. Claim 26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The prior art of record neither discloses nor teaches the additional step of further treating the alkali insoluble fibrous in the manner recited in claim 26 to produce galactose. As for claim 27, the prior art of record neither discloses nor teaches the step of extracting a fibrous component from lupins as specifically set forth in claim 27 and including the further processing to prepare an insoluble precipitate and hydrocolloid.

**Response to Arguments**

14. Applicant's arguments filed 1/6/11 are moot in view of the new grounds of rejection necessitated by amendment.

***Conclusion***

15. Applicant's amendment necessitated the new grounds of rejection presented in this Office action due to the significant amendment of the claims including broadening of claim 1 with regard to PF2. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within



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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Anthony Weier  
March 11, 2011